

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018623**Date Inspected:** 17-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Lv Li Qing**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Nagalingam Pandaram Pillai was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing:-

BAY#14

This QA Inspector performed Ultrasonic testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated a (UT) report for this date. The members are identified as OBG Segment 13AW Bottom Panel to Longitudinal Diaphragm. The weld designation reviewed is as follows:

SEG3007U-101,103,104,105,106,107,108

SA7038-035, 051

During the Quality Assurance Ultrasonic Testing (UT) review of weld located on Orthotropic Box Girder (OBG) segment 13AE, this Quality Assurance Inspector (QA) discovered the following issue:

- One (1) longitudinal linear indication measuring approximately 10mm in length.
- The indication dB rating is a +4.
- The Material thickness is 18mm.
- The depth of the indication is approximately 16mm.

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- The Y distance for this indication is 495 mm from the weld joint no: LD3026-001-002.
- The weld is identified as SEG3007U-102 at Bike path side Panel Point PP118.
- This weld is Butt weld joining between Longitudinal Diaphragm (LD3026) to Bottom Panel (3031A).
- The indication is clearly marked on or near the weld.
- The Segment 13AE is located at Bay#14.

The Notice of Witness Inspection (NWIT) No. is 007810. The indication is located within an area previously tested and accepted by ZPMC Quality Control (QC) personnel. The above mentioned discrepancy was informed to the Lead Inspector for further action.

In process Inspection:-

BAY#14

This QA Inspector observed the following work in progress:

SMAW in the 2F position for the OBG Segment 13CE Side panel stiffener. The weld joint was designated as: SEG3011D-132/133. The welder is identified as #067765. ZPMC QC is identified as Mr. Zhong yong gang. The welding variables recorded by QC appear to comply with WPS-B-P-2112-FCM-1.

This QA Inspector observed the following work in progress:

SMAW in the 1G position for the OBG Segment 14E Bottom panel to Side panel. The weld joint was designated as: SEG3019A-028. The welder is identified as #044772. ZPMC QC is identified as Mr. Zhong yong gang. The welding variables recorded by QC appear to comply with WPS-B-P-2211-TC-U4B-FCM-1.

This QA Inspector observed the following work in progress:

SMAW in the 1G position for the OBG Segment 13AE Longitudinal Diaphragm to Floor Beam. The weld joint was designated as: SEG3007G-004. The welder is identified as #068097. ZPMC QC is identified as Mr. Wang Xu. The welding variables recorded by QC appear to comply with WPS-B-P-2211-B-U2-FCM-1. Please see the attached picture.

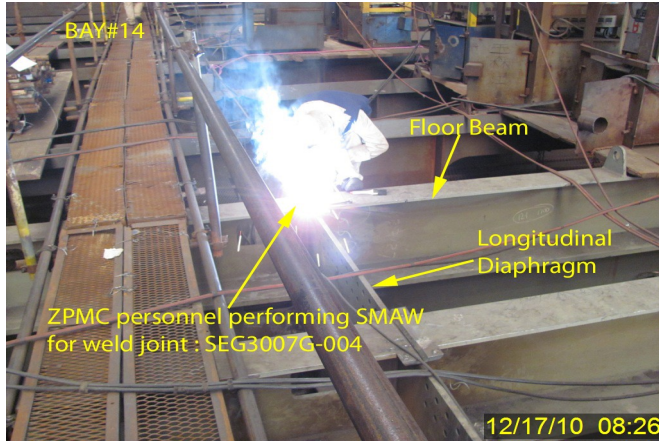
This QA inspector observed the following work in progress:

SMAW welding of weld joint no: SEG3011D-098 located on OBG Segment 13CE Side panel Stiffener. Welder is identified as #069683. ZPMC CWI is identified as Mr. Lv Li Qing. Welding was performed according to the weld repair report B-WR17038. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-3G(3F)-FCM-Repair. Please see the attached picture.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No Relevant Conversation.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Pillai,Pandaram

Quality Assurance Inspector

Reviewed By: Patel,Hiranch

QA Reviewer